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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,348	10/29/2001	Christopher Oldfield	0435.064	6458

23405 7590 11/18/2003

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ALBANY, NY 12203

EXAMINER

LISH, PETER J

ART UNIT	PAPER NUMBER
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1754

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/037,348

Applicant(s)

OLDFIELD, CHRISTOPHER

Examiner

Peter J Lish

Art Unit

1754

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 14-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 14-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Applicant's arguments filed 9/8/03 have been fully considered but they are not persuasive. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the use of mineral acid) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). In response to applicant's argument that the Paul et al. reference teaches a means of removing calcium sulfate from an aqueous solution rather than a means of purifying calcium sulfate, these are deemed to achieve the same results, see *In re Dillon*, 16 USPQ 2d. 1897.

The rejections of the previous office action under 35 U.S.C. 112 have been overcome by amendment.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 14-19 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Morris et al. (US 5,234,602).

Morris et al. teaches a method of removing scale, such as that containing calcium sulfate, from an aqueous solution. The method comprises creating an aqueous medium with a pH in the

Art Unit: 1754

range of between 10 and 14, adding a chelating agent to chelate the calcium sulfate, acidifying the solution using a mineral acid to lower the pH, wherein the calcium sulfate is precipitated and removed. The process of removing the precipitate comprises mechanical treatment, such as centrifugation, decantation, or filtration. After removal, the solution is then treated to raise the pH back to between 10 and 14, and reused for the removal of calcium sulfates. The chelating agents comprise polyaminopolycarboxylic acids or salts of such acids. No difference is seen between the process of Morris et al. and that of the instantly claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 20 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Morris et al.

Morris et al. is applied above. It is not explicitly taught that the chelating agents of Morris et al. are soluble at a pH of less than 4, however, it is expected that this be the case, because they are acidic compounds and because no difference is seen between the chelating agents of Morris et al. and those of the instantly claimed invention.

Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris et al. as applied to claim 14 above, and further in view of FR 2510140.

Art Unit: 1754

FR 2510140 teaches on page 4, lines 24-25, the use of amino-carboxylic acids and quarternary ammonium compounds as chelating agents for calcium sulfate. It would have been obvious to one of ordinary skill at the time of invention to use the amino-carboxylic acids or quarternary ammonium compounds of FR 2510140 in the process of Morris et al., in order to provide a chelating agent for calcium sulfate.

Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Morris et al. as applied to claim 14 above, and further in view of Lesinski (US 3,308,065).

Morris et al. teaches the use of polyaminopolycarboxylic acids or salts of such acids. Morris does not explicitly teach the use of quarternary ammonium groups as solubilizing functional groups on the chelating agents. Lesinski, however, teaches the removal of scale, such as that comprising calcium sulfate, from an aqueous medium with the use of chelating acids such as polyaminopolycarboxylic acids or the ammonium salts thereof. It is expected that the ammonium salts of these chelating acids comprise quarternary ammonium groups. It would have been obvious to one of ordinary skill at the time of invention to use the ammonium salts of the chelating acids, as taught by Lesinski, as the chelating salts of Morris et al. because they are polyaminopolycarboxylic acid salts capable of chelating scale. While it is not explicitly taught that the salts are soluble at a pH of less than 4, it is expected that this be the case, since no difference is seen between the salts of Lesinski and those of the instantly claimed invention.

Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Morris et al.

Art Unit: 1754

Morris et al. is applied above. Morris teaches that the chelating agents preferably comprise polyaminopolycarboxylic acids or salts of such acids. While the specific preferred polyaminopolycarboxylic acids are not taught, it would have been obvious to one of ordinary skill at the time of invention to use one of the polyaminopolycarboxylic acids of claim 22, as they represent known polyaminopolycarboxylic acids.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter J Lish whose telephone number is 703-308-1772. The examiner can normally be reached on 9:00-6:00 Monday through Friday.

Art Unit: 1754

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman can be reached on 703-308-3837. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

PL



STUART L. HENDRICKSON
PRIMARY EXAMINER